



Heart Failure

MYCOPHENOLATE NOT AZATHIOPRINE WITH INCREASED RISK FOR SKIN CANCER AFTER HEART TRANSPLANT

Poster Contributions

Poster Sessions, Expo North

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Background: Skin cancer is the most common malignancy after heart transplant (Htx). It is common belief that azathioprine (AZA) may be more carcinogenic, thus patients have been switched to other antiproliferative drugs. It has not been well established which immunosuppression (IMS) regimen contributes to the development of this malignancy.

Methods: Between 1994 and 2007, we reviewed 930 Htx patients and found 92 (10%) Htx patients who developed various forms of skin cancer. These patients were divided into specific skin cancers including basal cell, squamous cell, melanoma, others. Furthermore, patients were subdivided into those that received cyclosporine (CSA)/AZA, CSA/mycophenolate (MMF), and tacrolimus (TAC)/MMF IMS. 10 year actuarial outcomes were recorded.

Results: In the 92 patients with skin cancer, squamous cell cancer was the largest group (70%). Most patients responded to local excision; however, 3% required chemotherapy. The average time to onset of skin cancer was 7.4 ± 3.9 years and the average age of patients developing skin cancer was 67.2 ± 9.4 years. CSA/AZA treated patients had the least incidence of skin cancer and least amount of squamous cell cancer (see table).

Conclusion: Contrary to popular belief, CSA/AZA appears to have the least association with the development of skin cancer compared to CSA/MMF and TAC/MMF. Previous change in IMS away from AZA for skin cancer may merit a paradigm change.

Outcome	CSA/AZA (N = 20)	CSA/MMF (N = 32)	TAC/MMF (N = 40)
Incidence of Skin Cancer, n (%)	20/294 (7%)	32/278 (12%)†	40/358 (11.2%)‡
Squamous Cell, n (%)	9/13 (69%)	17/22 (77%)	7/12 (58%)
Mean Time to Skin Cancer, Years \pm SD	9.1 ± 4.6	7.8 ± 4.1	$6.2 \pm 2.5^*$

† p = 0.050 CSA/MMF vs CSA/AZA

‡ p = 0.055 TAC/MMF vs CSA/AZA

* p < 0.05 TAC/MMF vs CSA/AZA